U.S.S.N. 10/780,381

Specification Amendments

Please replace paragraph 0020 with the following rewritten paragraph:

0020 FIG. 7A depicts a so-called "series" hybrid configuration 136 having an internal combustion engine 142 coupled to a modular hybrid transmission unit 144. Modular hybrid transmission unit 144 includes an electric generator 154 that produces electrical energy for powering the vehicle drive wheels 150 via an electric motor 156 and gear set 158. Electrical storage device 152 stores electrical energy via the generator 154 when the internal combustion engine produces more power than required, and supplements engine power via the electric motor when power demand exceeds the engine power output. FIG. 7B show a so-called "parallel" hybrid configuration 138 wherein modular hybrid transmission unit 146 delivers driveline torque via a first power path having the internal combustion engine 142, a coupling device 160 and a gear set 162. The coupling devices 160, can be any suitable devices, for example a gear set or clutch, for transmitting mechanical energy to the vehicle driveline 1[[6]]50. The coupling devices 160, 166 can be the same device. FIG. 5C shows a so-called "parallel-series" configuration 140

wherein a modular hybrid transmission unit 148 includes motor/generators 172, 174 electrically and/or mechanically coupled, for example via planetary gearset, to deliver power to a gearset 170 and driveline 150.

Please replace paragraph 0035 with the following rewritten paragraph:

0035 Alternately, to provide more flexibility and quicker clutch reaction times, an active torque limiting system may be employed in which certain operating parameters of the clutch 72 are controlled or adjusted immediately prior to its activation in response to a braking event producing reactive torque. FIG. 3 shows a torque limiting system that employs~~ing~~ active control of the clutch 72. Like the previously described embodiment, the clutch 72 shown in FIG. 3 is also automatically actuated in response to reactive torque applied on its output shaft. In this alternate embodiment however, the level of resistance by the clutch 72 to reactive torque can be varied. In other words, the point at which the clutch 72 begins to slip in response to reactive torque can be controlled, based on any of a variety of operating conditions and events. The resistance or "slip" level of the clutch 72 is determined by a signal delivered to the

clutch 72 by a clutch pressure adjustor 114 based on commands issued by a controller 76. The adjustor 114 may be any of various known devices that generates an output control signal capable controlling an adjustment mechanism in the clutch 72 to either increase or decrease the clutch pressure. This signal may be mechanical, hydraulic or electrical, depending on the exact construction of the clutch 72. The controller 76 may be a dedicated, programmed device, or an existing controller on the vehicle which is used to set the clutch pressure as an auxiliary operating function.

Please replace paragraph 0040 with the following rewritten paragraph:

0040 Attention is now also directed to FIG. [[6]] 5 which shows the basic steps employed in carrying out the control method of the invention. First, the brake and other systems on the vehicle are monitored to determine whether a sudden braking event has occurred, is about to commence, or could potentially occur in the immediate future. As previously discussed, this monitoring function is performed by any a variety of sensors on the vehicle which feed information to the controller 76. The events or

conditions being sensed may be prioritized into two or more groups. Thus, 1 st level events are sensed at 94, such as those suggesting that a sudden braking event is likely to occur or may be eminent. Upon sensing one or more 1st level events, the controller 76 issues a command to the adjustor 114 which in turn adjusts the pressure of the clutch 72 to a 1st level, as shown at step 96. Then, when the system senses a 2nd level event at step 98, typically a condition indicating that sudden braking has actually commenced, the clutch pressure is adjusted to a second level as shown at step 100. The system continues the monitoring process until the events giving rise to clutch pressure adjustment have ended, as shown at step 102. If the events have not ended, the last clutch pressure setting is maintained, as shown at step 106. However, if the events have ended, then the clutch pressure is reset to its normal value, as indicated at step 104.